acid.

12. (amended) A method of sample storage, which comprises:

homogenizing a living body-derived sample to produce a homogenized sample consisting essentially of said living body-derived sample and a surfactant; and

storing the homogenized sample.

REMARKS/ARGUMENTS

This is a full and timely response to the non-final Official Action mailed September 11, 2002. Reexamination and reconsideration in light of the above amendments and the following remarks are courteously requested.

By the foregoing amendment, the specification and claims 1 and 12 have been amended. No claims are added or canceled. Thus, claims 1 to 12 are currently pending for the Examiner's consideration.

In the Office Action, the Examiner objected to the specification because the nucleic acid sequences included reference codes that did not match the sequence listing submitted according to the sequence listing rules. The present amendment removes the reference codes that the Examiner objected to, and it is respectfully requested that the objection be withdrawn.

The Examiner rejected claims 1 to 6 under 35 U.S.C. § 102(b) as being anticipated by Steiner et al., 23 Nucleic Acids Research 2569 (1995) ("Steiner"). Steiner discloses a plant tissue that is ground into dry material, and a rapid one-step extraction (ROSE) buffer containing 1% sodium lauryl sarkosyl is added to the ground tissue (page 2569, column 1). Further, Steiner discloses that 400 µl of ROSE containing 1% sodium lauryl sarkosyl is added to100 µl human blood sample (page 2570, col. 1-2). Steiner also discloses that the homogenized blood or tissue sample is directly added to a PCR reaction solution (page 2569, column 1).

The present amendment to claim 1 recites that a homogenized sample *consisting essentially of a living body-derived sample and a surfactant* is directly added to a reaction solution. The homogenized sample is in sharp contrast with the ROSE buffer of Steiner, which includes additional components such as Tris-HCl, EDTA, and PVPP. These reagents are used in

the Steiner method because the Steiner method is directed to extraction of plant samples. However, the addition of such reagents together would materially affect the presently claimed homogenized sample, which is used for deriving nucleic acids particularly from animal samples.

Because Steiner fails to teach or suggest a method that includes the step of preparing a homogenized sample that consists essentially of a living body sample and a surfactant, the Steiner reference does not render the present claims 1 to 6 obvious. "To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974)." M.P.E.P. § 2143.03. Accord. M.P.E.P. § 706.02(j).

Claims 1, and 7 to 11 are rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,501,963 ("Burckhardt"). These rejections are respectfully traversed, both in light of the present amendment and in light of the claims as originally filed. Burckhardt discloses a method of amplifying nucleic acids in blood samples by placing the blood samples into a PCR reaction solution containing a nonionic surfactant such as Tween 20. However, Burckhardt fails to teach or suggest the claimed homogenization step where a sample is homogenized prior to being exposed to a reaction solution. Because Burckhardt fails to teach or suggest each and every feature of the claimed method, it is respectfully requested that the rejection of claims 1, and 7 to 11 be withdrawn.

The Examiner rejected claim 12 under 35 U.S.C. § 102(b) as being anticipated by Liu et al., "Effects of three Sample Preservation Method on Total DNA Preparation of Porcine Whole Blood," 21 Di-San Junyi Daxue Xuebao 25 (1999) ("Liu"). Liu discloses that blood samples can be stored following the addition of SDS-EDTA to the blood samples. However, Liu makes no mention of the use of any type of surfactant in its storage method. Consequently, the present amendment overcomes the Liu reference.

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page is captioned **"Version with markings to show changes made."**

For the foregoing reasons, all the claims now pending in the present application are believed to be clearly patentable over the prior art of record. Accordingly, favorable reconsideration of the claims in light of the above remarks is courteously solicited. If the Examiner has any comments or suggestions that could place this application in even better form, the Examiner is requested to telephone the undersigned attorney at the below-listed number.

Dated: December 11, 2002

Respectfully submitted,

By 

David K. Benson
Registration No.: 42,314
(202) 955-3750
Attorneys for Applicant

Version With Markings to Show Changes Made

In the Specification

On page 12, please amend the paragraphs spanning lines 6 to 7 as follows.

[GH20:] 5' GAAGAGCCAAGGACAGGTAC 3'

[GH21:] 5' GGAAAATAGACCAATAGGCAG 3'.

In the Claims

1. (amended) A method for synthesis of nucleic acids to amplify an intended nucleic acid from a sample which comprises:

homogenizing a living body-derived sample to produce a homogenized sample consisting essentially of said living body-derived sample and a surfactant; and then

directly adding the homogenized sample to a reaction solution to amplify the nucleic acid.

12. (amended) A method of sample storage, which comprises:

homogenizing a living body-derived sample to produce a homogenized sample consisting essentially of said living body-derived sample and a surfactant; and

storing the homogenized sample.